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ABSTRACT

This report discusses the attitudes of Wyoming teachers toward tests and their use. The teachers' educational background in tests and measurement; the use of tests by teachers; and the classroom testing practices of teachers were evaluated. A questionnaire was developed and administered. The results indicated that Wyoming teachers' testing practices are consistent with results in other states. On the average, Wyoming teachers spend six hours a week constructing and giving classroom tests. They use tests to measure student achievement, evaluate their own teaching, determine grades, identify weaknesses, review material, and for ongoing assessment. Over 90 percent of Wyoming teachers believe that standardized tests are not the best way to evaluate a teacher's effectiveness. Almost 60 percent believe that teachers understand standardized test results. Over 60 percent believe that a competency test requirement for students would raise educational standards. Attitudes toward classroom tests were, on the average, slightly favorable, while attitudes toward standardized tests tended to be unfavorable. The survey instrument is appended. (DWH)

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WYOMING TEACHERS' USE OF TESTS AND
ATTITUDES TOWARD CLASSROOM AND STANDARDIZED TESTS*

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INTRODUCTION

Testing in American schools has been and continues to be a subject of controversy from the local to the national level. With accountability demands placed on district, state, and national educational institutions and the information demands of objective-based instructional systems, testing at all levels has increased. The overwhelming majority of states have instituted minimum competency testing at some level for high school graduation, for college matriculation, for teacher certification (Yeh, 1980). The modes of testing and the content of tests may be changing, but testing itself remains a fact of life in the public and private educational systems.

This report deals with several different aspects of attitudes toward and use of tests in Wyoming schools from the perspective of the teacher. The teacher is the primary contact between the student and the educational system. Teachers' attitudes toward the tests they give and toward the practice of testing can influence many facets of education: the quality of the tests given, the meaning in test scores, the way in which the information is used, the evaluations made by students (and parents) as well as by the teacher, and the students' perceptions of themselves, the school, and the instructional process. In addition, to some degree the teacher assesses his or her own performance as an educator and the effectiveness of the curriculum on the basis of classroom and standardized test results.

The information on the following pages reports Wyoming teachers' educational background in tests and measurements--the amount and recency of training and the perceived effectiveness of that training; the use of tests by Wyoming teachers--how often they are given, what kinds, and for what purposes; the

classroom testing practices of Wyoming teachers--the amount of time spent on test construction, the use of contemporary measurement techniques, and the use of test results and attitudes of Wyoming teachers toward classroom and standardized tests, and toward current issues in testing.

It is hoped that this document will both provide both baseline information and directions for further investigation regarding teachers' use of tests in Wyoming schools.

METHODS

Instrument

The questionnaire was pretested with several teachers who were enrolled at the University of Wyoming as graduate students. This resulted in some revisions. In its final form the questionnaire contained 49 items addressing the following areas: (a) demographic/background information, (b) educational history of the subjects, especially coursework in tests and measurement, (c) classroom testing practices, (d) attitudes toward classroom tests, (e) standardized testing practices, (f) attitudes toward standardized tests, and (g) interests in in-service training in tests and measurements. Response format varied by section; formats used were Likert scales, free response, and fixed response.

Subjects

Our goal was to survey approximately 500 teachers in the State of Wyoming. The size of the potential subject population was based on expectations of 70% return rate. Such a return rate would yield grade-level and subject-area subsamples sufficiently large enough in number for separate analysis.

The procedure used for subject selection was as follows: A master list of all Wyoming educators was obtained from the State Department of Education. Two names per page were selected from this list (credentialed teachers only) and these persons were included in the first mailing. The 15th and 30th names on each page were chosen. The teachers in this potential subject pool were sent a letter explaining the nature of the study (Appendix A), a copy of the questionnaire, and a stamped return envelope.

A return rate of 55% was obtained from the first mailing. Approximately two weeks later a postcard reminder was sent to nonrespondents. An additional 14% of the subject pool responded to this reminder. A final mailing was sent approximately two weeks later. Subjects received a second copy of the questionnaire and a stamped return envelope with this mailing. An additional 12% of the subject pool responded. The final sample consisted of 555 subjects, or 81% of the original pool.

Characteristics of the participating subjects are summarized in Table 1. The sample includes a greater percentage of females, primarily as a consequence of the overrepresentation of females among elementary school teachers. The greatest percentage of teachers in the total sample and at each of the three grade level subsamples is in the 30 to 39 years age range. The average number of years of teaching experience is 12.

The greatest proportion of subjects teach in Wyoming towns. The distribution of rural, town, and city schools appears consistent with that of all Wyoming schools. The greater percentage of rural elementary teachers participating is probably a function of the fact that elementary-aged children are likely to be sent to local, rural schools, but junior and senior high aged rural children are likely to be transported to consolidated county schools

Table 1. Sample characteristics^a

	Total Sample (n=555)	Elementary (n=288)	Junior High (n=103)	Senior High (n=129)
Sex				
Male	46.5	21	50.0	59.5
Female	63.5	79	50.0	40.5
Age Group				
20-29	21	24	18	19
30-39	40	37	44	46
40-49	24	23	26	24
50-59	13	14	12	14
60+	2	2	1	2
Years Teaching Experience	12	12	12	13
Location of School				
Rural	22	26	16	17
Town	55	52	54	56
City	24	22	30	27
Bachelors	100	100	100	100
U.W. Graduate	33 ^b	32	36	32
Masters	23	16	36	32
U.W. Graduate	33	33	37	28

^a Figures are expressed as percentage of total sample or subsample.

^b Figure is expressed as percent of total sample with bachelor degree who obtained degree from University of Wyoming.

located in towns or cities.

All of the participating teachers reported that they hold bachelor degrees, with approximately one-third obtaining their degrees from the University of Wyoming. Approximately 23% of the total sample hold master's degrees. A greater percentage of teachers at the secondary level than at the elementary level have completed these advanced degrees. Of those subjects with masters degrees, again approximately one-third obtained those degrees from the University of Wyoming.

The background in tests and measurements of the participating subjects is summarized in Table 2. Eighty-two percent of the subjects report having taken coursework in tests and measurements (elementary: 81%; junior high: 84%; senior high: 86%). Of these 82%, almost all (94%) had some coursework in this area at the undergraduate level, and approximately one-half have had some form of in-service. With few exceptions, the coursework in tests and measurements was required. In spite of the high percentage of subjects with a background in the tests and measurements area, the coursework may be quite dated. On the average the last coursework in this area was completed 10 years prior to the survey. This coursework was perceived as fair to good in quality but only somewhat useful.

Subject area responsibilities of the participating teachers are listed in Tables 3, 4, and 5. The participating sample appears to be representative in terms of their teaching responsibilities. As expected, the majority of elementary teachers are responsible for all content areas. At the junior and senior high levels the most frequently reported areas of responsibility are in the core areas of English, math, social studies, science, and physical education. There is also a minority representation from the vocational fields of industrial arts and home economics at the senior high level.

Table 2. Course work in tests and measurements

	Total Sample	Elementary	Junior High	Senior High
When taken				
Undergraduate	94%	97%	93%	90%
Graduate	62	57	70	67
Inservice	51	49	57	53
Required	92%	92%	93%	91%
Median year of most recent course	1974	1974	1974	1973
Perceived quality of course				
Excellent	9%	8%	10%	9%
Good	42	41	39	44
Fair	38	42	36	32
Poor	12	9	15	14
Unintelligible	0	0	0	1
Perceived usefulness of course				
Very useful	17%	14%	19%	17%
Somewhat useful	62	60	67	67
Not useful in my subject area	7	7	4	8
Not useful at my grade level	8	14	4	2
Total waste of time	6	5	6	7

Table 3. Subject area responsibilities of the elementary sample (n=294)

Area	Percent	(n)
All subjects	63	(186)
Reading	4	(13)
Math	4	(12)
Music	4	(12)
Special Education	4	(12)
Physical Education	4	(11)
English	3	(8)
Science	2	(7)
Social Studies	2	(6)
Resource Room	2	(6)
Other	11	(32)
Not reported	5	(16)

Table 4. Subject area responsibilities of the junior high sample (n=103)

Area	Percent	(n)
Math	19	(20)
Social Studies	17	(17)
Science	16	(16)
English	14	(14)
Language Arts	10	(10)
Physical Education	9	(9)
Music	7	(7)
Industrial Arts	7	(7)
Home Economics	6	(6)
Health	4	(4)
Special Education	4	(4)
Other	15	(15)
Not reported	1	(1)

Table 5. Subject area responsibilities of the senior high sample (n=129)

Area	Percent	(n)
English	19	(25)
Social Studies	17	(22)
Math	13	(17)
Business Education	12	(15)
Science	9	(12)
Physical Education	5	(7)
Industrial Arts	5	(7)
Home Economics	5	(6)
Auto Mechanics	5	(6)
Other	23	(30)
Not reported	1	(1)

RESULTS

Classroom Testing Practices of Subjects

On the average, Wyoming teachers spend six hours ($\bar{X}=6.15$) a week constructing and giving classroom tests. This figure includes the making up of test questions, putting the tests together, administering, marking, and going over tests. Elementary level teachers report that they construct fewer of their own test items than secondary level teachers, $t(1,482)=-8.68, p<.01$, and that they rely more heavily on items provided in teacher manuals, $t(1,455)=6.88, p<.01$. Elementary teachers also differ from secondary teachers in the nature of the test they construct. Elementary teachers use true-false, essay, and short answer type items less frequently than secondary teachers, $t(1,463)=-2.71, p<.01$; $t(1,450)=-9.39, p<.01$; $t(1,498)=-6.21, p<.01$; respectively. Elementary and secondary teachers use multiple choice, completion and matching items with approximately the same frequency (see Appendix B).

Elementary teachers report using norm-referenced, criterion-referenced, and diagnostic tests more frequently than secondary teachers, $t(1,471)=-3.59, p<.01$; $t(1,459)=-4.50, p<.01$; $t(1,462)=-4.85, p<.01$; respectively. There is no difference in the frequency in which the two educational groups use performance and competency tests. The finding of greater use of criterion-referenced tests at the elementary level is not surprising given that the mastery of basic skills is emphasized at this level. Nor is the greater use of diagnostic tests at this level unexpected. Sound educational practices include the early identification of weaknesses for remediation. The greater use of norm-referenced tests at the elementary level is surprising, however. The expectation is that comparisons with the achievement of classmates or other groups are more important at the higher educational levels where curriculum and

career decisions require knowledge of the student's abilities relative to others. Perhaps respondents equated norm-referenced tests with standardized tests which provide comparisons with national norm groups, ignoring classroom tests which provide comparisons with the local peer group. Such an interpretation is consistent with the fact that elementary teachers report that they administer standardized tests more frequently than secondary teachers (see Table 8).

At both the elementary and secondary levels little use appears to be made of those classroom testing skills typically taught in tests and measurements courses. Teachers report that they rarely use Bloom's Taxonomy of Objectives, test reliability, descriptive statistics, or item analysis. Further, computer technology has not been extended to classroom testing practices. Teachers report that, on the average, they never use microcomputers for test administration or analysis, and rarely use micros for grade keeping. Micros for grade keeping is more common at the secondary level, $t(1,399)=-2.98, p<.01$.

The measurement of achievement is the major reason why Wyoming teachers give classroom tests (see Table 6). Less common reasons for administering classroom tests are to evaluate their own teaching and to determine grades. There is little variance in the reported purposes for giving classroom tests across the three educational levels.

Major Uses of Standardized Tests

The major uses of standardized tests reported by the sample are listed in Table 7. In general, there appears to be consensus among the three grade levels about the appropriate uses of standardized tests. The findings are summarized below.

Table 6. Major purposes in giving classroom tests

	Total Sample (n=513)	Elementary (n=226)	Junior High (n=97)	Senior High (n=122)
Measure of achievement	82	81	86	35
Evaluation of own teaching	29	29	18	26
Determination of grades	21	18	26	26
Identification of weaknesses	13	14	13	7
Review of material	12	12	7	14
On-going assessment	8	9	7	7

- * Nearly one-third of the sample (28%) noted that one major reason why they administered standardized tests to their students was to fulfill district requirements.
- * Standardized tests were more likely to be used to identify student weakness at the elementary level than at the secondary level.
- * Standardized tests were used as a measure of growth or progress most frequently at the senior high level.
- * Standardized tests were used least frequently for the purpose of comparing students with norms at the senior high level.
- * Junior high school teachers most frequently used standardized tests to assist with placement decisions.
- * Senior high school teachers most frequently used standardized tests to evaluate their curriculum and to evaluate their own teaching.
- * Standardized tests are rarely used by teachers for on-going assessment purposes.

Those standardized tests reportedly used by the teachers in the sample are listed in Table 8.

Attitudes Toward Current Issues in Testing

One portion of the questionnaire was directed toward determining the attitudes of Wyoming teachers toward current national and local issues in the field of tests and measurements (see Appendix C). The results are summarized below:

- * The vast majority (90.4%) of Wyoming teachers believe that standardized tests are not the best way to evaluate a teacher's effectiveness.
- * Only a small minority (2.9%) of teachers believe that teachers whose students score higher on standardized tests should receive higher salaries.

Table 7. Major uses of standardized tests

	Total Sample (n=251)	Elementary (n=186)	Junior High (n=46)	Senior High (n=19)
Identification of weaknesses	29	33	24	21
Required by district	28	29	28	16
Measure growth or progress	22	24	15	32
Evaluation of curriculum	21	23	22	32
Assistance with placement decisions	21	19	33	21
Comparison of students with norms	14	16	17	5
Evaluation of teaching	10	11	15	32
On-going assessment	4	2	11	16

Table 8. Standardized tests given by teachers

Tests given by elementary	Junior High	Senior High
SRA (74 ^a)	SRA (14)	SRA (4)
Iowa Test of Basic Skills (37)	Iowa Test of Basic Skills (11)	-Woodcock (4)
Stanford Achievement Test (32)	Stanford Achievement Test (7)	Stanford Achievement Test (3)
Metropolitan Achievement Test (23)	California Test of Basic Skills (6)	Iowa Test of Basic Skills (2)
California Test of Basic Skills (18)	Metropolitan Achievement Test (3)	Brigance (2)
Otis (9)	district test (3)	Others:
-Gates McGintie (5)	Others:	Accounting Test
-Stanford Diagnostic Test (5)	MMPI	WRAT
Others:	President's Physical Fitness Test	Otis
-Woodcock	-Stanford Diagnostic Reading Test	California Test of Basic Skills
-Herman Nelson	WRAT	
President's Physical Fitness Test	-Ginn Reading Test	
-Metropolitan Reading Readiness Test	California Achievement Test	
district test	-Gates McGintie	
Key Math	Otis	
Brigance	-Woodcock	
-Ginn Reading Test		
WRAT		
Stanford-Binet		
Boehm Test of Basic Skills		

^aNumber reporting use of that test.

- * A minority (38.5%) of teachers advocate a required standardized testing program for districts throughout the state.
- * A majority (57.6%) believe that teachers understand standardized test results.
- * A majority (61.1%) of teachers believe that a competency test requirement for students would raise educational standards.
- * A minority (44.1%) believe that requiring teachers to pass competency tests would raise educational standards.
- * A minority (26.7%) of teachers believe that handicapped students should be exempt from any competency requirements.
- * A majority (62.2%) of teachers support a uniform grading system within a district

Attitudes Toward Classroom and Standardized Tests

Another portion of the questionnaire included items directed toward assessing several aspects of attitudes toward tests. Individual items were combined into subscales by using factor analysis to identify item clusters. The facets of attitudes, number of items in each facet, the internal consistency reliability (Cronbach's α), and included items (see Appendix A) are:

- * Value of Tests, 6 questions, $\alpha=.64$ (Items 21, 22, 27, 28, 29, 35)
- * Personal Past Experience with Tests, 3 questions, $\alpha=.61$ (Items 24, 30, 39)
- * Test Fairness, 5 questions, $\alpha=.64$ (Items 20, 23, 25, 31, 36)
- * Disadvantages of Tests, 6 questions, $\alpha=.68$ (Items 26, 32, 33, 34, 37, 38)
- * Standardized Test Usefulness, 5 questions, $\alpha=.75$ (Items 40, 41, 42, 43, 44)
- * Usefulness of Standardized Test Results, 5 items, $\alpha=.68$ (Items 5, 6, 7, 9, 10)

Table 9. Attitudes toward classroom and standardized tests

Subscale	Total		Elementary		Junior High		Senior High	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Value of Tests	4.18 ^a	.63	4.15	.62	4.19	.60	4.24	.64
Personal Experience with Tests	4.02	.65	3.99	.66	4.07	.58	4.07	.66
Test Fairness	4.02	.53	3.99	.54	4.03	.46	4.08	.54
Test Disadvantages	3.41	.63	3.33	.59	3.48	.66	3.53	.66 ^b
Standardized Test Usefulness	3.54	.74	3.60	.71	3.50	.69	3.45	.82
Standardized Test Result Use	2.75	.84	2.75	.81	2.81	.86	2.70	.89

^aRatings were on a 1-6 scale, with 6 indicating a more favorable attitude toward tests.

^bGroup differences are significant at $p < .05$.

There were slight differences in attitudes across grade level, with attitude being more favorable as grade level increased. The only facet for which differences were significant was Disadvantages of Tests, with senior high teachers seeing tests as having fewer disadvantages than elementary level teachers. Cumulatively, however, effects were significant as well ($F=5.89$, $p<.01$).

Attitudes toward classroom tests were, on the average, slightly favorable while attitudes toward standardized tests tended to be unfavorable.

Comparison of Wyoming and South Dakota Teachers

Gullickson (1982) surveyed the testing practices of 336 South Dakota teachers in grades 3, 7, and 10 in the curricular areas of science, social studies and language arts. Although the Gullickson study is more restricted than the current sample in terms of grade and subject areas, it provides some interesting comparisons.

The Wyoming sample reports greater course work preparation in the tests and measurements area, with 82% having taken one or more courses compared to 57% of the South Dakota sample. However, there appears to be little difference in the frequency of use by the two teacher groups of those principles traditionally taught in such courses. Both teacher groups report that they rarely use descriptive statistics, item difficulty indices or reliability information (see Table 10).

The identical proportion (93%) of teachers in the two state samples report that they generate their own test items in the construction of classroom tests (Table 10). The use of published items, such as those found in teacher manuals appears more prevalent in Wyoming. In both samples elementary teachers rely more heavily on published items than secondary teachers. An interest-

Table 10. Comparison of South Dakota and Wyoming testing practices

	Wyoming		South Dakota	
Uses descriptive statistics	19 ^a		10-13	
Uses item difficulty indices	34		31	
Uses reliability estimates	29		29	
Uses short answer items	85		92	
Uses matching items	83		77	
Uses multiple choice items	54		68	
Uses true-false items	54		68	
Uses essays	53		58	
Writes own items	93		93	
elementary		88		85
junior high		98		NA
senior high		98		96
Uses items from publishers	85		60	
elementary		89		75
junior high		75		61
senior high		82		47
Uses other teachers' items	34		NA	
elementary		32		9
junior high		45		20
senior high		35		9

^a Figures for Wyoming indicate the percent of teachers who reported the behavior listed as at least "sometimes" characteristic of themselves.

ing pattern was noted in the Gullickson study concerning the sharing of test items by teachers which was replicated in the current study. Junior high teachers are more likely than elementary or senior high teachers to share items, $t(1,82) = -1.91, p < .03$. Two factors may account for this finding. At the junior high level there is both a core curriculum and multiple sections of each class. Collaboration would therefore be more likely than at the elementary level, with fewer sections of each class, or at the senior high level, where the curricula is more varied.

Teachers in both states administer classroom tests with the same frequency, about once or twice a week. Wyoming teachers report that they spend a greater amount of time on test construction (a median of 300 minutes vs. 190 minutes for the South Dakota sample). The time difference appears to be accounted for in differences in the time spent in correcting tests. The Wyoming sample reports spending four times as much time in correcting tests (2 hours vs. 30 minutes).

Both groups report an identical order of preference of item types in classroom testing. That order is short answer, matching, multiple choice, true-false and essay. Elementary teachers in both samples use essay items less frequently than teachers at other educational levels. Other patterns in item use noted in the Gullickson sample were not replicated in the Wyoming sample. For example, elementary teachers in South Dakota use multiple choice items less frequently than secondary teachers while Wyoming elementary teachers use true-false and short answer items less frequently.

Comparison of Elementary Teachers in Wyoming and California

Yeh et al. (1981) recently surveyed 260 elementary teachers from 20 rural and urban schools in the State of California to assess their testing practices.

Thirty-nine percent of the California sample reported that they had two or more college courses in tests and measurements compared to 26% of the Wyoming sample. Approximately an equal percentage of teachers from both samples reported no previous course work (23% California vs. 19% Wyoming). A majority of teachers in both samples reported some form of in-service on these topics.

Wyoming teachers report that their primary reasons for giving classroom tests are to measure achievement, evaluate their own teaching and determine grades. California elementary teachers report that they use classroom tests to evaluate the effectiveness of the classroom program, provide information to others, and assign grades. Both samples felt that too much time was spent on testing.

Only 72% of the Wyoming elementary teachers administer standardized tests to their classes in contrast to all California elementary teachers. The results of such tests appeared to be used more systematically by the California sample, chiefly for reading and math placement decisions. The results of standardized tests appeared to play only a minor role in the placement decisions of the Wyoming sample.

Interest in Inservice Training

Table 11 presents a summary by grade level taught of reported interest in inservice training. Considerable interest was expressed in performance testing (as opposed to paper-and-pencil tests). Interest was also expressed, surprisingly, in assessing test reliability and validity and in using microcomputers for testing.

Table 11. Interest in inservice training

Topic	Total	Elementary	Junior High	Senior High
Understanding the results of standardized tests	24% ^a	26%	20%	23%
Constructing criterion-referenced tests	32	31	38	27
Assessing test reliability and validity	47	40	55	55
Developing tests to use for selecting children for special programs	34	44	26	19
Designing classroom tests	42	37	49	47
Selecting standardized tests for your school	16	20	12	11
Writing objective items	13	9	17	19
Writing and grading essay tests	24	18	28	34
Alternatives to paper and pencil tests	15	56	41	48
Using microcomputers in testing	44	43	41	46

^aPercent indicating an interest in this topic.

Discussion

Results of this survey of Wyoming teachers' testing practice are consistent with results found in other states, with Wyoming teachers possibly reporting slightly greater use of contemporary testing techniques. Several points will be revised below.

All Wyoming teachers have at least a bachelor's degree, with 23% having a master's. However, 18% of the sample have had no previous tests and measurements coursework at all, either in a degree program or on an inservice basis. And, for those having such coursework, on the average it's been 10 years since it was updated. Perceptions of tests and measurements coursework were reported as positive regarding quality but negative regarding utility - being only somewhat useful. Fennessey (1982) suggests that training in this area would ideally be focused on the student's area of the curriculum. Thus, multiple sections or blocks of courses would need to be offered, with each tailored to tests and measurement as used in that subject area (e.g., physical education, art, English). The suggestion was also made that grade level be considered, with courses structured for elementary and secondary levels.

As an average, respondents reported spending 6 hours per week (nearly 15% of their time) on classroom tests. However, they report only occasional use of item analysis, descriptive test and item statistics, behavioral objectives, Bloom's taxonomy, etc. Goehring (1981) found that a majority of teachers and principals thought use of reliability and validity coefficients and item/test analysis data to be important in sound testing practice. It may be inferred that tests are used extensively but that testing practice may be less than optimal. Newman & Stallings (1982) found teachers to be no more competent in their testing practice now than they were a decade or more ago. Extensive

use of tests (with its concomitant demand on teacher time) and failure to use testing principles held to be important by most textbook authors suggests that this area is in need of revision. Change could come in the application of microcomputer technology. Use of micros for testing would hopefully reduce demands on teacher time and also would efficiently provide test and item statistics useful in improving tests. Change could also come via a centralization of testing resources (e.g., item banks) which could be made available to classroom teachers.

Consistent with Lazar-Morrison (1980), it was found that while teachers give standardized tests, the results are not always (or even often) used. Attitudes toward use of standardized tests in the present study were, on the average, negative: Lambert (1981) lists suggestions for altering practice/attitudes: teachers should learn more about existing tests and how to interpret them (favored by deans and AFT-NEA officials), teachers should accept standardized tests as useful measures (favored by legislators), and teachers must be cautioned against over-reliance on tests. Agencies named as potentially instrumental in effecting change were professional associations, local school district offices, state departments of education, and teacher organizations.

As Table 11 shows, teachers in the sample expressed considerable interest in upgrading their skills in tests and measurement with particular interest in the performance testing and the use of microcomputers.

References

- Fennessy, D. (1982). Primary teachers' assessment practices: some implications for teacher training. Paper presented at the annual meeting of the South Pacific Assn. for Teacher Education, Frankston, Victoria, Australia: (ERIC Document ED 229346)
- Goehring, H.J. (1981). Perceptions of secondary school professional personnel in relation to teacher training in pupil evaluation procedures. Blue Ridge Technical College, Flat Rock, N.C. (ERIC Document ED 209264)
- Gullickson, A.R. (1982). The practice of testing in elementary and secondary schools. (ERIC Document ED 229391)
- Lambert, R.F. (1981). Teacher attitudes on testing: a multiple perspective. College Board Review, 118, 13-14, 29-30.
- Lazar-Morrison, C. (1980). A review of the literature on test use. Center for the Study of Evaluation, California University, Los Angeles. (ERIC Document ED 204411)
- Newman, D.C., & Stallings, W.M. (1982). Teacher competency in classroom testing, measurement preparation, and classroom testing practice. Paper presented at the American Educational Research Assn. Conference, New York. (ERIC Document ED 220491)
- Yeh, J.P. (1980). A re-analysis of test-use data. Center for the Study of Evaluation, California University, Los Angeles. (ERIC Document ED 205590)
- Yeh, J.P., Herman, J.L., & Rudner, L.M. (1981). Teachers and testing: a survey of test use. Center for the Study of Evaluation, California University, Los Angeles. (ERIC Document ED 218336)



THE UNIVERSITY OF WYOMING

COLLEGE OF EDUCATION — BOX 3374
DEPARTMENT OF EDUCATIONAL FOUNDATIONS
AND INSTRUCTIONAL TECHNOLOGY

LARAMIE, WYOMING 82071

February 10, 1984

Dear Wyoming Educator:

Do you think that standardized tests are the best way to evaluate a teacher's effectiveness? Do you think that all districts should have a uniform grading system? Do you think that handicapped pupils should be exempt from competency test requirements?

We (Kathy and Susan) are interested in your answers to these questions and others. We are surveying teachers in the state to find out how they use tests, both classroom and standardized, what attitudes are about tests, and how they think testing practices could be improved. Your participation with this project is requested. The survey results will help us to identify topics which may need emphasis in the undergraduate program here at the UW, or which could be covered in in-service workshops.

This project is being carried out by the two of us as a University research project. We have the approval and financial support of both the University and the State Department of Education (i.e., postage and printing). Your participation is the key to the success of this project, however. Your reply is important for several reasons: First, we won't get an accurate representation of attitudes of teachers from your grade and subject area without your reply. Second, because our sample will be fairly small (due to budget limitations) each reply is valuable.

We wish to assure you that your reply will be anonymous. We have written an ID number on the first page of the survey. This ID number will let us know that you have returned the questionnaire so we will not send you any follow-up cards.

If you have any questions, please write them at the end of the questionnaire or on a separate page along with your address and we will try to answer them. Or, call us directly at 766-5329.

Thank you for your help.

Sincerely,

Kathy Green, Ph.D.
Assistant Professor

Susan Stager, Ph.D.
Assistant Professor

SURVEY OF WYOMING TEACHERS' TEST USE AND ATTITUDES

Dept. of Educational Foundations
University of Wyoming

February 1984

Please write in or circle the appropriate answer to the following questions. The initial section requests background information; the following section requests information about test use and attitudes.

1. Grade(s) currently taught _____
In what subject area(s)? _____

2. a. How many years of teaching experience have you had (including this year)? _____
b. What university degree(s) do you hold:
Degree _____ Major _____ From UW? yes no
Degree _____ Major _____ From UW? yes no

3. a. Age group: 20-29 30-39 40-49 50-59 60+
b. Sex: Male Female

4. a. Have you had course work in tests and measurements?
yes (CONTINUE BELOW) no (GO TO QUESTION 5)
b. If yes, how many courses?
Undergrad _____ Graduate _____ In-service _____
c. Were any of these required? yes no
d. When was your most recent course in tests and measurements? 19____
e. What are your perceptions of the quality and usefulness of tests and measurements courses?
Quality: _____
 _____ Excellent
 _____ Good
 _____ Fair
 _____ Poor
 _____ Unintelligible
Usefulness: _____
 _____ Very useful
 _____ Somewhat useful
 _____ Not useful in my subject area
 _____ Not useful at my grade level
 _____ Total waste of time

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Test Use and Attitudes: Please circle the number corresponding most closely to your opinion about the following statements. There are no right or wrong answers to these questions--we would like your opinions.

	Strongly Agree	Moderately Agree	Agree	Disagree	Moderately Disagree	Strongly Disagree
5. Standardized tests are the best way to evaluate a teacher's effectiveness.	1	2	3	4	5	6
6. Teachers whose students score higher on standardized tests should receive higher salaries.	1	2	3	4	5	6
7. All districts in the state should be required to use the same standardized testing program.	1	2	3	4	5	6
8. Teachers do not understand standardized test results.	1	2	3	4	5	6
9. Requiring students to pass competency tests would raise educational standards.	1	2	3	4	5	6
10. Requiring teachers to pass competency tests would raise educational standards.	1	2	3	4	5	6
11. Handicapped students should be exempt from any competency test requirements.	1	2	3	4	5	6
12. School districts should have a uniform grading system, for example, percentage cut-offs.	1	2	3	4	5	6

	Strongly Agree	Moderately Agree	Agree	Disagree	Moderately Disagree	Strongly Disagree
41. Standardized tests assess only unimportant educational outcomes.	1	2	3	4	5	6
42. Standardized tests force teachers to "teach to the test."	1	2	3	4	5	6
43. Low scores on standardized tests damage a student's self-concept.	1	2	3	4	5	6
44. Standardized tests generate harmful anxiety in students.	1	2	3	4	5	6
45. Do you administer (a) standardized test(s) to your class? yes (CONTINUE BELOW) no (GO TO QUESTION 47)						
If yes, please complete the following:						
Name of Test	Given: Fall Winter Spring					
Name of Test	Given: Fall Winter Spring					
46. If you use (a) standardized test(s), for what purposes do you use it?						
1.						
2.						
3.						

Strongly Agree
Moderately Agree
Agree
Disagree
Moderately Disagree
Strongly Disagree

Test scores are a fair way to grade students.

1 2 3 4 5 6

Tests tend to discriminate against minority students.

1 2 3 4 5 6

Teachers' testing practices are often ineffective.

1 2 3 4 5 6

Tests measure only superficial aspects of what students know and can do.

1 2 3 4 5 6

Test construction takes up more time than it's worth.

1 2 3 4 5 6

The tests I took as a student were generally good assessments of my knowledge of an area.

1 2 3 4 5 6

Tests tend to create too much anxiety in students.

1 2 3 4 5 6

Too many tests are given to students already.

1 2 3 4 5 6

At present I have no objections to taking tests myself.

1 2 3 4 5 6

STANDARDIZED TESTS

Standardized tests serve no useful

1 2 3 4 5 6

13. From where do you get your test items? Please indicate an approximate percentage.

Construct my own
Use items from manuals
Use other teachers' items
Other?

14. How often do you give classroom tests?

More than once a week
Once a week
Once every two weeks
Once a month
Less frequently than once a month

15. Approximately how many hours per week are spent doing the following activities?

Making up test questions
Putting the test together
Marking tests
Administering and going over tests

16. What are your major purposes in giving classroom tests?

1.
2.
3.

17. Do you use criterion-referenced tests? yes no

If yes, how do you set criteria?

Use pre-set criteria
Use distribution of students' scores
Use standards from previous administrations
Other?

18. On the average, what percent of a student's grade will be based on classroom test results (as opposed to projects, attendance, etc.)?

19. How often do you use each of the following in your classroom testing?

Please circle the appropriate response. If not applicable to your content area, circle "never."

	Never	Rarely	Sometimes	Frequently	Very Often	Always
True-false questions	1	2	3	4	5	6
Essay questions	1	2	3	4	5	6
Multiple choice questions	1	2	3	4	5	6
Short answer questions	1	2	3	4	5	6
Completion questions	1	2	3	4	5	6
Matching questions	1	2	3	4	5	6
Diagnostic tests	1	2	3	4	5	6
Norm-referenced tests	1	2	3	4	5	6
Criterion-referenced tests	1	2	3	4	5	6
Performance tests	1	2	3	4	5	6
Competency tests	1	2	3	4	5	6
Behavioral objectives	1	2	3	4	5	6
Table of specifications	1	2	3	4	5	6
Higher-level questions (i.e., application, analysis, evaluation)	1	2	3	4	5	6
Graphs, tables, maps, etc. with items	1	2	3	4	5	6
Files of previously used test items	1	2	3	4	5	6
Bloom's taxonomy	1	2	3	4	5	6
Test reliability	1	2	3	4	5	6
Descriptive test statistics	1	2	3	4	5	6
Item difficulty levels	1	2	3	4	5	6
Item analyses	1	2	3	4	5	6
Cut-off scores for mastery tests	1	2	3	4	5	6
Microcomputers for test taking	1	2	3	4	5	6
Microcomputers for test analysis	1	2	3	4	5	6
Microcomputers for grade keeping	1	2	3	4	5	6

For the following questions, please circle the number corresponding most closely to your opinion about the statement. The first set of questions refer to CLASSROOM TESTS.

20. Testing has a favorable impact on student motivation.
21. Tests are of little value in identifying learning problems.
22. Tests tend to penalize the brighter, more creative students.
23. Teachers spend too little time testing.
24. I did well on tests when I was in school.
25. Tests are effective ways to direct student learning.
26. Tests measure too many things besides knowledge of content.
27. I have not found my own test results to be of much value to me.
28. Tests are of great value in communicating with parents about a student's progress.
29. It is relatively easy to construct tests in my subject area.
30. I personally dislike taking tests.

	Strongly Agree	Moderately Agree	Agree	Disagree	Moderately Disagree
20. Testing has a favorable impact on student motivation.	1	2	3	4	5
21. Tests are of little value in identifying learning problems.	1	2	3	4	5
22. Tests tend to penalize the brighter, more creative students.	1	2	3	4	5
23. Teachers spend too little time testing.	1	2	3	4	5
24. I did well on tests when I was in school.	1	2	3	4	5
25. Tests are effective ways to direct student learning.	1	2	3	4	5
26. Tests measure too many things besides knowledge of content.	1	2	3	4	5
27. I have not found my own test results to be of much value to me.	1	2	3	4	5
28. Tests are of great value in communicating with parents about a student's progress.	1	2	3	4	5
29. It is relatively easy to construct tests in my subject area.	1	2	3	4	5
30. I personally dislike taking tests.	1	2	3	4	5

47. Please indicate your overall attitude toward
standardized tests:

useless	1	2	3	4	5	6	7	useful
disfavor	1	2	3	4	5	6	7	favor

48. Also, please indicate your overall attitude toward
classroom tests:

useless	1	2	3	4	5	6	7	useful
disfavor	1	2	3	4	5	6	7	favor

49. Listed below are some topics that could serve as the
basis for inservice training. Please check any
topics that you would be especially interested in
learning more about.

- ☐ Understanding the result of standardized tests
- ☐ Constructing criterion-referenced tests for your
class(es)
- ☐ Assessing the reliability and validity of your
own tests
- ☐ Developing tests to use for selecting children
for special programs
- ☐ Designing classroom tests
- ☐ Selecting standardized tests for your school
- ☐ Writing objective item types
- ☐ Writing and grading essay tests
- ☐ Alternatives to paper and pencil tests
- ☐ Using microcomputers in testing
- ☐ Other? _____

Do you have any questions about or comments on this survey?
Were there questions which should have been included which
weren't? Please add any comments you have about tests or
testing.

APPENDIX B

How often do you use each of the following in your classroom testing?

	Never	Rarely	Sometimes	Frequently	Very Often	Always
True-false questions	19.1	27.0	37.5	12.0	3.0	1.1
Essay questions	28.1	18.1	25.0	13.9	10.1	4.1
Multiple choice questions	9.1	9.1	30.8	32.8	15.9	2.2
Short answer questions	9.7	5.4	26.0	31.3	21.9	5.6
Completion questions	9.9	10.9	29.2	29.6	17.4	3.0
Matching questions	7.9	9.6	34.9	31.0	15.0	1.7
Diagnostic tests	22.7	21.5	28.0	16.4	8.2	3.2
Norm-referenced tests	41.6	30.2	20.4	3.7	3.1	1.0
Criterion-referenced tests	34.0	15.8	26.8	12.9	7.0	3.5
Performance tests	13.2	12.2	27.6	24.7	17.8	4.5
Competency tests	28.5	16.2	26.0	16.6	10.0	2.7
Behavioral objectives	21.2	19.7	27.4	13.3	10.6	7.7
Table of specifications	59.2	19.4	13.5	4.6	2.1	1.3
Higher-level questions (i.e., application, analysis, evaluation)	26.4	15.7	30.5	14.6	9.8	3.1
Graphs, tables, maps, etc. with items	26.9	20.6	31.6	14.9	5.7	.4
Files of previously used test items	21.9	19.0	30.8	19.0	6.7	2.5
Bloom's taxonomy	51.5	14.5	20.5	7.6	4.1	1.8
Test reliability	51.5	19.4	18.2	6.7	3.0	1.2
Descriptive test statistics	60.4	20.7	13.0	3.5	1.4	1.0
Item difficulty levels	47.5	18.4	19.4	8.9	3.9	1.9
Item analysis	48.6	18.2	20.8	7.5	3.7	1.2
Cut-off scores for mastery tests	43.8	14.5	18.9	11.7	7.6	3.5
Microcomputers for test taking	81.9	9.7	6.1	.8	1.1	.4
Microcomputers for test analysis	84.8	7.6	3.8	1.5	1.3	1.0
Microcomputers for grade keeping	77.9	4.8	4.2	3.4	3.4	6.3

APPENDIX C

	Strongly Agree	Moderately Agree	Agree	Disagree	Moderately Disagree	Strongly Disagree
1. Standardized tests are the best way to evaluate a teacher's effectiveness.	.4 ^a	3.6	5.6	33.2	12.2	45.0
2. Teachers whose students score higher on standardized tests should receive higher salaries.	.2	.9	1.8	28.4	6.9	61.8
3. All districts in the state should be required to use the same standardized testing program.	5.1	8.2	25.2	24.5	7.5	29.4
4. Teachers do not understand standardized test results.	3.3	10.0	29.1	36.1	11.5	10.0
5. Requiring <u>students</u> to pass competency tests would raise educational standards.	6.6	17.8	36.7	23.1	7.9	7.9
6. Requiring <u>teachers</u> to pass competency tests would raise educational standards.	5.1	10.4	31.6	30.3	7.5	15.1
7. Handicapped students should be exempt from any competency test requirements.	5.5	4.1	17.1	44.3	12.2	16.2
8. School districts should have a uniform grading system, for example, percentage cut-offs.	13.5	12.6	36.1	21.0	6.6	10.2

^aAll figures are expressed as percent of the total sample (N=555).